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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/813,244	03/20/2001	Teruji Yamakawa	0941.65336	1734

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EXAMINER

PATEL, GAUTAM

ART UNIT	PAPER NUMBER
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2655

DATE MAILED: 10/27/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

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Office Action Summary

Application No.

09/813,244

Applicant(s)

YAMAKAWA ET AL.

Examiner

Gautam R. Patel

Art Unit

2655

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 September 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) 6-16 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-7 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 2, 4.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

1. Claims 1-16 are pending for the examination. Claims 8-16 are withdrawn from further consideration.

Election/Restriction

2. Claims 8-16 withdrawn from further consideration by the examiner, 37 C.F.R. § 1.142(b) as being drawn to figs. 16-42 and class 369/47.33; for storing recording information in CAV and/or CLV environment. Election was made with traverse of claims 1-7.

Applicant's election with traverse of group A in paper No. 6 is acknowledged. The traversal is on the ground(s) that "the other group and all other species would not place an undue burden on the Examiner. The non-elected claims share several common features with the elected claims, and a search for the two groups would likely overlap." ... ".

This is not found persuasive because, the Examiner does not need to show separate classification or field of search for election of the species requirement. And non-elected claims may share several common features but these claims also have different limitations, which will require separate search. See 803.00 and 808.01(a); M.P.E.P.

The requirement is still deemed proper and is therefore made **FINAL**.

Applicant is reminded that upon the **cancellation of claims to a non-elected invention, the inventorship must be amended** in compliance with 37 C.F.R. § 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be

accompanied by a diligently-filed petition under 37 C.F.R. § 1.48(b) and by the fee required under 37 C.F.R. § 1.17(h).

The Applicants are urged to cancel non-elected claims 8-16

Priority

3. Receipt is acknowledged of papers submitted under 35 U.S.C. § 119(a)-(d), which papers have been placed of record in the file.

Specification

4. The disclosure is objected for following reasons.

The title of the invention is neither precise nor descriptive. A new title is required which should include, using twenty words or fewer, claimed features that differentiate the invention from the Prior Art. It is recommended that the title should reflect the gist of or the improvement of the present invention.

Correction is required.

Claim Rejections - 35 U.S.C. § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. § 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-2, and 5-7 are rejected under 35 U.S.C. § 102(b) as being anticipated by Yokota et al., US. patent 5,646,921 (hereafter Yokota).

As to claim 1, Yokota discloses the invention as claimed [see Figs. 1-6, especially 2 and 6] including a detecting step and a controlling step, comprising the steps of:

a detecting step which detects a state within a memory which temporarily stores write data to be written on the recording medium and/or read data read from the recording medium [col. 11, lines 28-63 and col. 15, lines 36-61]; and

a controlling step which switches and controls a rotational speed of the recording medium based on the state detected by the detecting step, depending on an area which is accessed of a plurality of areas of the recording medium dividing the recording medium in the radial direction thereof [col. 11, lines 28-63 and col. 15, lines 36-61].

6. As to claim 2, Yokota discloses:

said controlling step switches the rotational speed when a capacity of the memory occupied by the read data exceeds a first capacity during a read access, and switches the rotational speed when a vacant capacity of the memory exceeds a second capacity during a write access [col. 15, line 36 to col. 16, line 25 and col. 16, lines 34-62]

7. As to claim 5, Yokota discloses:

said controlling step switches the rotational speed after a predetermined time elapses from a time when conditions for switching the rotational speed are satisfied [col. 15, lines 36-61].

NOTE: When capacity is checked and, the threshold is compared for that capacity, inherently Aa predetermined time elapses from a time when condition for switching speed are satisfied.

8. As to claim 6, it is rejected for the same reasons set forth in the rejection of claim 5, supra.

9. As to claim 7, it is rejected for the same reasons set forth in the rejection of claim 5, supra.

Claim Rejections - 35 U.S.C. § 103

10. The following is a quotation of 35 U.S.C. § 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

11. Claims 3-4 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Yokota as applied to claims 1-2 and 5-7 above and in view of Syobatake et al., US. patent 5,083,269 (hereafter Syobatake).

As to claim 3, Yokota discloses all of the above elements, including a detecting step and a controlling step. Yokota does not specifically disclose that speed is switched by giving priority to an access which uses a speed in use..

However, it is well known in the art that generally the priority is given to task at hand in this case speed in use because switching back and forth unnecessarily causes delay in the processing. Also Syobatake clearly discloses that it well known in the art of buffer management to give priority to task at hand [i.e. give priority to rotational speed in use] [abstract and col. 9, line 59 to col. 10, line 4]. Both Yokota and Syobatake are interested in improving data storage scheme and provide maximum efficiency in storage and movement of the data.

One of ordinary skill in the art at the time of invention would have realized that it is possible to provide a buffer device capable of dealing with multiple priority levels and efficient use of memory capacity utilization is a desired feature to have in a memory or a

buffer management scheme. Therefore, it would have been obvious to have used a priority selection type buffer in the system of Yokota as taught by Syobatake because one would be motivated to handle priority levels in higher efficiency manner, especially in a high speed buffer implementation and capacity of entire buffer structure will be utilized at a high efficiency [col. 9, line 60 to col. 10, line 4].

12. As to claim 4, it is rejected for the same reasons set forth in the rejection of claim 3, supra.

Other prior art cited

13. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

1. Akahira et al. (US. patent 5,729,513) Data storage apparatus for recording and reproducing ...
2. Chong et al. (US. patent 6,212,582) ¹¹Method for multi-priority .. *led.*
3. Sugiyama (US. patent 5,606,543) Recording multiplex coded signals ..
4. Matsui (US. patent 6,028,539) ¹¹Buffer control method ...

Contact information

14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gautam R. Patel whose telephone number is (703) 308-7940. The examiner can normally be reached on Monday through Thursday from 7:30 to 6.

The appropriate fax number for the organization (Group 2650) where this application or proceeding is assigned is (703) 872-9314.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ms. Doris To can be reached on (703) 305-4827.

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Any inquiry of a general nature or relating to the status of this application should be directed to the group receptionist whose telephone number is (703) 305-4700 or the group Customer Service section whose telephone number is (703) 306-0377.

A handwritten signature in black ink, appearing to read "Gautam R. Patel", with a long horizontal stroke extending to the right.

Gautam R. Patel
Patent Examiner
Group Art Unit 2655

October 20, 2003